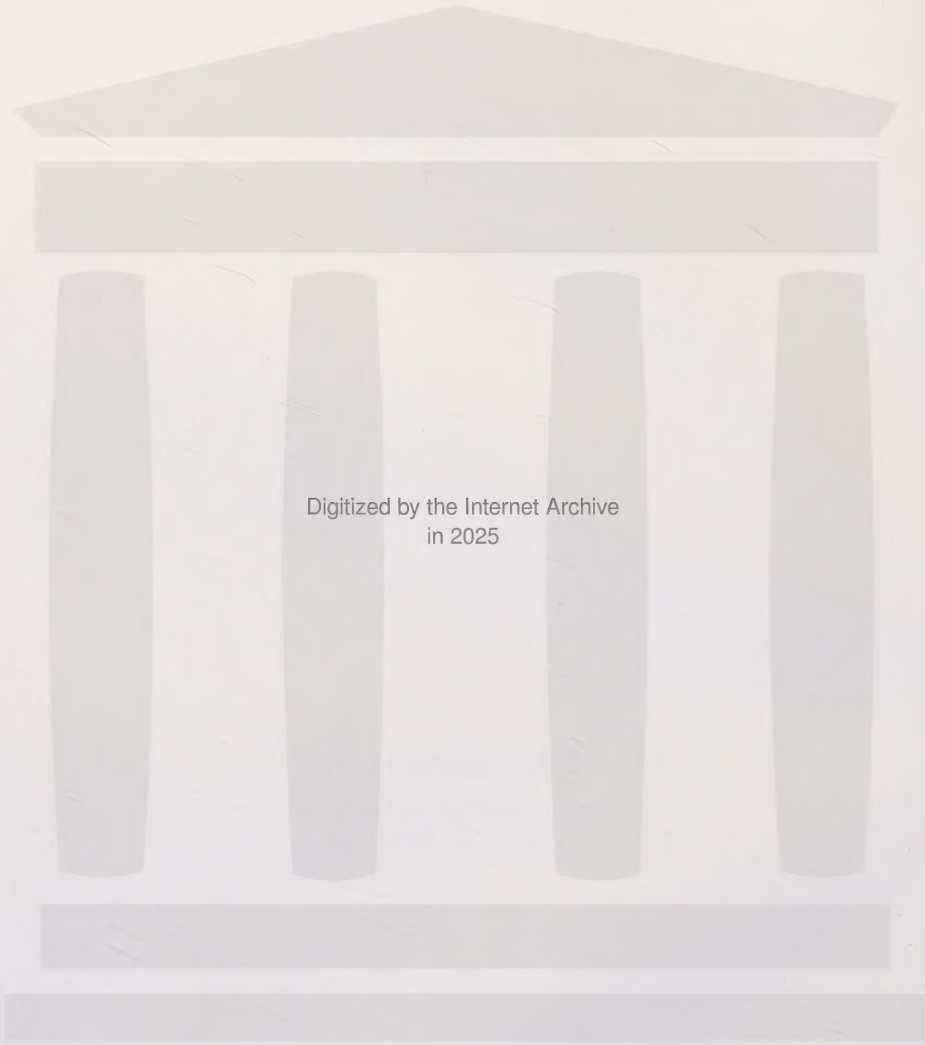
Queensland Journal of Agricultural and Animal Sciences

VOLUME 22, 1965

PUBLISHED QUARTERLY

By the Queensland Department of
Primary Industries, Brisbane

S. G. Reid, Government Printer, Brisbane



Digitized by the Internet Archive
in 2025

https://archive.org/details/queensland-journal-of-agricultural-and-animal-sciences_1965_22_index-contents

QUEENSLAND JOURNAL OF AGRICULTURAL AND ANIMAL SCIENCES

VOLUME 22, 1965

CONTENTS

No. 1, MARCH

PAGE

Evaluation of Meat-and-bone Meals in Rations for Growing Chickens. 1. Effect of Varying Levels of Blood and Bone. By R. J. W. GARTNER and H. W. BURTON 1

Factors Responsible for Failures in the Establishment of Summer Grasses on the Black Earths of the Darling Downs, Queensland. By J. K. LESLIE 17

Distribution of Chlorides in the Waters of the Catchment of Macintyre Brook, Southern Queensland, and Their Effect on Tobacco Production. By D. A. K. MCNEE and P. J. SKERMAN 39

Effects of Alpha Naphthalene Acetic Acid on Fruiting Patterns and Yield of Irrigated Cotton in Central Queensland. By K. G. TRUDGIAN 49

Studies on Codling Moth Control in the Stanthorpe District, Queensland. By M. BENGSTON 59

Insecticide Resistance in *Phthorimaea operculella* (Zell.) with Particular Reference to DDT. By B. R. CHAMP and ROSAMUND C. H. SHEPHERD 69

Studies of Plant and Soil Nematodes. 8. Two New Species of *Criconema* (Nematoda: Criconematidae) from Queensland. By R. C. COLBRAN 83

Studies of Macropodidae in Queensland. 1. Food Preferences of the Grey Kangaroo (*Macropus major* Shaw). By T. H. KIRKPATRICK 89

Influence of Preliminary Incubation on the Methylene Blue Results of Farm-refrigerated Milks. By PATRICIA C. LOANE 95

SHORTER COMMUNICATIONS

Control Trials Against the Brown Wheat Mite. By T. PASSLOW and J. W. TURNER 103

Scalicides for Use on Papaws in Queensland. By H. C. GREENING 107

No. 2, JUNE

Studies on Grass Silage from Predominantly *Paspalum dilatatum* Pastures in South-eastern Queensland. 3. Influence of Fertilization with Nitrogen and Method of Harvesting on Silages With and Without the Addition of Molasses. By M. S. LEVITT and M. S. O'BRYAN 109

Evaluation of Meat-and-bone Meals in Rations for Growing Chickens. 2. Effect of Blood Meal as a Partial Replacement for Meat-and-bone Meals. By H. W. BURTON and R. J. W. GARTNER 125

Growth of the Pedigree Large White Pig Population in Australia. By C. P. MCPHEE 137

Bionomics of Sorghum Midge (*Contarinia sorghicola* (Coq.)) in Queensland, with Particular Reference to Diapause. By T. PASSLOW 149

Overwintering Behaviour of *Tetranychus telarius* (L.) in the Stanthorpe District, Queensland. By M. BENGSTON 169

European Red Mite (*Panonychus ulmi* (Koch)) and its Adaptation to the Stanthorpe District, Queensland. By M. BENGSTON 169

PAGE

Stock and Scion Investigations. XI. A Twenty-year Pruning and Rootstock Trial with Apple Trees. By L. A. THOMAS 187

Chemical Thinning on Delicious Apples in the Stanthorpe District, Queensland. By B. C. DODD 193

An Investigation into the Chemical Constituents of Queensland-grown Ginger. By D. WINTERTON and K. RICHARDSON 205

SHORTER COMMUNICATIONS

Effect of 2,4,5-T Preplant Soil Spraying on the Establishment of *Stylosanthes gracilis*. By D. R. BAILEY 215

Effect of *Centrosema pubescens* Benth. on Soil Fertility in the Humid Tropics. By R. C. BRUCE 221

No. 3, SEPTEMBER

An Investigation of Peanut Storage Pests in Queensland. 1. Introduction, Species and Pest Status. By B. R. CHAMP 227

An Investigation of Peanut Storage Pests in Queensland. 2. Insecticidal Treatment of Bulk Nut-in-Shell Peanuts in Silos. By B. R. CHAMP and J. N. CRIBB 241

Insects and Mites Associated with Stored Products in Queensland. 1. Psocoptera. By B. R. CHAMP and C. N. SMITHERS 259

Fusarium Rhizome Rot of Ginger in Queensland. By D. S. TEAKLE 263

Studies of Plant and Soil Nematodes. 9. *Trichodorus lobatus* n.sp. (Nematoda: Trichodoridae), a Stubby-root Nematode Associated with Citrus and Peach Trees. By R. C. COLBRAN 273

Studies of Plant and Soil Nematodes. 10. *Paratylenchus coronatus* n.sp. (Nematoda: Criconematidae), a Pin Nematode Associated With Citrus. By R. C. COLBRAN 277

Evaluation of Meat-and-bone Meals in Rations for Growing Chickens. 3. Effect of Cooking Time in the Preparation of Meat-and-bone Meal and Effect of added Tallow in Poultry Rations. By R. J. W. GARTNER and H. W. BURTON 281

Examination of Queensland Stock Feeds and Fertilizers of Animal Origin for Salmonella. By JEAN K. ELDER and G. C. SIMMONS 291

Studies of Macropodidae in Queensland. 2. Age Estimation in the Grey Kangaroo, the Red Kangaroo, the Eastern Wallaroo and the Red-necked Wallaby, with Notes on Dental Abnormalities. By T. H. KIRKPATRICK 301

Studies of Macropodidae in Queensland. 3. Reproduction in the Grey Kangaroo (*Macropus major*) in Southern Queensland. By T. H. KIRKPATRICK 319

Bacteriological Quality of Some Farm Water Supplies in Queensland. By LORNA G. LIGHTBODY 329

Production of Bacterial Alpha-amylase in Queensland Egg Pulp. By PATRICIA C. LOANE 335

SHORTER COMMUNICATIONS

Effect of Stage and Intensity of Defoliation on the Growth of Cowpea. By R. E. HENDRICKSEN 343

Incidence of *Byssochlamys fulva* in Queensland-grown Strawberries. By K. C. RICHARDSON 347

Bacterial Leaf Spot of Guar. By MELDA L. MOFFETT and J. L. ALCORN 351

Nematodes Associated with Wheat in Queensland. By R. C. COLBRAN and JANET S. MCCULLOCH 353

Effect of Fruit Size on the Cool Storage Behaviour of Granny Smith Apples. By C. D. STEVENSON and E. T. CARROLL 357

Effectiveness of a Quaternary Ammonium Detergent-Sanitizer for Sanitizing Milking Equipment. By J. ARMITT and M. G. SMITH 365

PAGE

Effect of Salt/Urea Blocks on Body-weight, Body Composition and Wool Production of Sheep Fed Low-protein Native Grass Hay. By R. M. BEAMES and J. G. MORRIS 369

Reliability of Dairy Sire Surveys in Production Recorded Herds. By C. H. CLARK .. 381

Effects of Withholding Irrigation After Transplanting Tobacco. By G. D. KEEFER, G. GIBSON, H. T. GREEN and P. H. J. VAN WAVEREN 387

Pineapple Growth and Yield as Influenced by Urea Spray Schedules and Potassium Levels at Three Plant Spacings. By A. R. MITCHELL and M. E. NICHOLSON .. 409

Stock and Scion Studies. XIII. Some New Clonal Pear Rootstocks. By L. A. THOMAS 419

A Study of Various Methods and Herbicides in Eucalyptus Regrowth Control. By N. D. YOUNG 423

Trees and Soil Nutrients in South-western Queensland. By J. P. EBERSOHN and P. LUCAS 431

A Study of the Species of *Colletotrichum* Causing Ripe Fruit Rots in Queensland. By J. H. SIMMONDS 437

Insecticide Resistance in *Phthorimaea operculella* (Zell.): Larval Responses to Endrin and Azinphos-ethyl. By B. R. CHAMP and ROSAMUND C. SHEPHERD 461

Control of Woolly Aphid (*Eriosoma lanigerum* (Hausm.)) in the Stanthorpe District, Queensland. By M. BENGSTON 469

A Wilt of Strawberry Caused by a New Form of *Fusarium oxysporum*. By BARBARA L. WINKS and YOLANDE N. WILLIAMS 475

Studies of Plant and Soil Nematodes. 11. *Carphodorus bileneatus* n.g., n.sp. (Nematoda:Dolichodorinae) from Eucalypt Forest in Queensland. By R. C. COLBRAN 481

Maize Fertilizer Investigations on the Atherton Tableland, Queensland. By J. VAN HAERINGEN 485

Effects of Plant Density on Maize Yield on the Atherton Tableland, Queensland. By J. VAN HAERINGEN and J. VAN DER LIST 497

SHORTER COMMUNICATIONS

Tests of Cotton Seed Treatments for Early Emergence. By R. B. BYGOTT 503

Controlled Atmosphere Storage of Jonathan Apples. By E. T. CARROLL 507

Insecticide Resistance in *Phthorimaea operculella* (Zell.): Comparative Responses to DDT, DDD, Endrin, Dieldrin, Isobenzan, Lindane and Azinphos-ethyl. By B. R. CHAMP and ROSAMUND C. H. SHEPHERD 511

A Possible Basis of Inheritance of DDT Resistance in *Phthorimaea operculella* (Zell.). By B. R. CHAMP and ROSAMUND C. H. SHEPHERD 515

Protection of Stored Potato Tubers Against *Phthorimaea operculella* (Zell.). By ROSAMUND C. H. SHEPHERD and B. R. CHAMP 519

INDEX TO VOL. 22

A

PAGE

Alcorn, J. L. (with Melda L. Moffett)—
"Bacterial Leaf Spot of Guar" 351

"An Investigation into the Chemical Constituents of Queensland-grown Ginger" .. 205

"An Investigation of Peanut Storage Pests in Queensland. 1. Introduction, Species and Pest Status" 227

"An Investigation of Peanut Storage Pests in Queensland. 2. Insecticidal Treatment of Bulk Nut-in-Shell Peanuts in Silos" 241

"A Possible Basis of Inheritance of DDT resistance in *Phthorimaea operculella* (Zell.)" 515

Apples—
chemical thinning 193
stock and scion trials 187
storage 357, 507

Armitt, J. (with M. G. Smith)—
"Effectiveness of a Quaternary Ammonium Detergent-Sanitizer for Sanitizing Milking Equipment" 365

"A Study of the Species of *Colletotrichum* Causing Ripe Fruit Rots in Queensland" .. 437

"A Study of Various Methods and Herbicides in Eucalyptus Regrowth Control" .. 423

"A Wilt of Strawberry Caused by a New Form of *Fusarium oxysporum*" 475

B

"Bacterial Leaf Spot of Guar" 351

"Bacteriological Quality of Some Farm Water Supplies in Queensland" 329

Bailey, D. R.—
"Effect of 2,4,5-T Preplant Soil Spraying on the Establishment of *Stylosanthes gracilis*" 215

Beames, R. M. (with J. G. Morris)—
"Effect of Salt/Urea Blocks on Body-weight, Body Composition and Wool Production of Sheep Fed Low-protein Native Grass Hay" 369

Bengston, M.—
"Control of Woolly Aphid (*Eriosoma lanigerum* (Hausm.)) in the Stanthorpe District, Queensland" 469
"European Red Mite (*Panonychus ulmi* (Koch)) and its Adaptation to the Stanthorpe District, Queensland 177
"Overwintering Behaviour of *Tetranychus telarius* (L.) in the Stanthorpe District, Queensland" 169
"Studies on Codling Moth Control in the Stanthorpe District, Queensland" .. 59

"Bionomics of Sorghum Midge (*Contarinia sorghicola* (Coq.)) in Queensland with particular Reference to Diapause 149

Brown wheat mite control 103

Bruce, R. C.—
"Effect of *Centrosema pubescens* Benth. on Soil Fertility in the Humid Tropics" 221

PAGE

Burton, H. W. (with R. J. W. Gartner)—
"Evaluation of Meat-and-bone Meals in Rations for Growing Chickens. 1. Effect of Varying Levels of Blood and Bone" 1
"Evaluation of Meat-and-bone Meals in Rations for Growing Chickens. 2. Effect of Blood Meal as a Partial Replacement for Meat-and-bone Meals" 125
"Evaluation of Meat-and-bone Meals in Rations for Growing Chickens. 3. Effect of Cooking Time in the Preparation of Meat-and-bone Meal and Effect of Added Tallow in Poultry Rations" 281

Bygott, R. B.—
"Tests of Cotton Seed Treatments for Early Emergence" 503

C

Carroll, E. T.—
"Controlled Atmosphere Storage of Jonathan Apples" 507

Carroll, E. T. (with C. D. Stevenson).—
"Effect of Fruit Size on the Cool Storage Behaviour of Granny Smith Apples" .. 357

Centro and soil fertility 221

Champ, B. R.—
"An Investigation of Peanut Storage Pests in Queensland. 1. Introduction, Species and Pest Status" 227

Champ, B. R. (with J. N. Cribb)—
"An Investigation of Peanut Storage Pests in Queensland. 2. Insecticidal Treatment of Bulk Nut-in-Shell Peanuts in Silos" 241

Champ, B. R. (with Rosamund C. H. Shepherd)—
"A Possible Basis of Inheritance of DDT Resistance in *Phthorimaea operculella* (Zell.)" 515
"Insecticide Resistance in *Phthorimaea operculella* (Zell.): Larval Responses to Endrin and Azinphos-ethyl" 461
"Insecticide Resistance in *Phthorimaea operculella* (Zell.): Comparative Responses to DDT, DDD, Endrin, Dieldrin, Isobenzan, Lindane and Azinphos-ethyl" 511
"Insecticide Resistance in *Phthorimaea operculella* (Zell.) with particular reference to DDT" 69
"Protection of Stored Potato Tubers Against *Phthorimaea operculella* (Zell.)" .. 519

Champ, B. R. (with C. N. Smithers)—
"Insects and Mites Associated with Stored Products in Queensland" 259

"Chemical Thinning on Delicious Apples in the Stanthorpe District, Queensland" .. 193

Clark, C. H.—
"Reliability of Dairy Sire Surveys in Production Recorded Herds" 381

Codling moth control 59
Colbran, R. C.—
"Studies of Plant and Soil Nematodes. 8. Two New Species of *Criconema* (Nematoda:Criconematidae) from Queensland" 83
"Studies of Plant and Soil Nematodes. 9. *Trichodorus lobatus* n.sp. (Nematoda: Trichodoridae), a Stubby-root Nematode Associated with Citrus and Peach Trees" 273
"Studies of Plant and Soil Nematodes. 10. *Paratylenchus coronatus* n.sp. (Nematoda:Criconematidae), a Pin Nematode Associated with Citrus" .. 277
"Studies of Plant and Soil Nematodes. 11. *Carphodorus bileanatus* n.g., n.sp. (Nematoda:Dolochodorinae) from Eucalypt Forest in Queensland" 481

Colbran, R. C. (with Janet S. McCulloch)—
"Nematodes Associated with Wheat in Queensland" 353

Colletotrichum fruit rots 437

PAGE

"Controlled Atmosphere Storage of Jonathan Apples" 507

"Control of Woolly Aphid (*Eriosoma lanigerum* (Hausm.)) in the Stanthorpe District, Queensland" 469

"Control Trials Against the Brown Wheat Mite" 103

Cotton—
effect of NAA 49
seed treatments 503

Cowpea defoliation 343

Cribb, J. N. (with B. R. Champ)—
"An Investigation of Peanut Storage Pests in Queensland. 2. Insecticidal Treatment of Bulk Nut-in-Shell Peanuts in Silos" 241

D

Dairy sire surveys 381

"Distribution of Chlorides in the Waters of the Catchment of Macintyre Brook, Southern Queensland, and their Effect on Tobacco Production" 39

Dodd, B. C.—
"Chemical Thinning on Delicious Apples in the Stanthorpe District, Queensland" 193

E

Ebersohn, J. P. (with P. Lucas)—
"Trees and Soil Nutrients in South-western Queensland" 387

"Effects of 2,4,5-T Preplant Soil Spraying on the Establishment of *Stylosanthes gracilis*" 215

"Effect of *Centrosema pubescens* Benth. on Soil Fertility in the Humid Tropics" .. 221

"Effect of Fruit Size on the Cool Storage Behaviour of Granny Smith Apples" .. 357

"Effect of Salt/Urea Blocks on Body-weight, Body Composition and Wool Production of Sheep Fed Low-protein Native Grass Hay" 369

"Effect of Stage and Intensity of Defoliation on the Growth of Cowpea" 343

"Effectiveness of a Quaternary Ammonium Detergent-Sanitizer for Sanitizing Milking Equipment" 365

"Effects of Alpha Naphthalene Acetic Acid on Fruiting Patterns and Yield of Irrigated Cotton in Central Queensland" 49

"Effects of Plant Density on Maize Yield on the Atherton Tableland, Queensland" .. 497

"Effects of Withholding Irrigation After Transplanting Tobacco" 387

Egg pulp quality 335

Elder, J. K. (with G. C. Simmons)—
"Examination of Queensland Stock Feeds and Fertilizers of Animal Origin for Salmonella" 291

Eucalyptus control 423

"European Red Mite (*Panonychus ulmi* (Koch)) and its Adaptation to the Stanthorpe District, Queensland" 177

"Evaluation of Meat-and-bone Meals in Rations for Growing Chickens. 1. Effect of Varying Levels of Blood and Bone" 1

"Evaluation of Meat-and-bone Meals in Rations for Growing Chickens. 2. Effect of Blood Meal as a Partial Replacement for Meat-and-bone Meals" 125

PAGE

"Evaluation of Meat-and-bone Meals in Rations for Growing Chickens. 3. Effect of Cooking Time in the Preparation of Meat-and-bone Meals and Effect of Added Tallow in Poultry Rations" 281

"Examination of Queensland Stock Feeds and Fertilizers of Animal Origin for Salmonella" 291

F

"Factors Responsible for Failures in the Establishment of Summer Grasses on the Black Earths of the Darling Downs, Queensland" 17

"Fusarium Rhizome Rot of Ginger in Queensland" 263

G

Gartner, R. J. W. (with H. W. Burton)—
"Evaluation of Meat-and-bone Meals in Rations for Growing Chickens. 1. Effect of Varying Levels of Blood and Bone" 1
"Evaluation of Meat-and-bone Meals in Rations for Growing Chickens. 2. Effect of Blood Meal as a Partial Replacement for Meat-and-bone Meals" 125
"Evaluation of Meat-and-bone Meals in Rations for Growing Chickens. 3. Effect of Cooking Time in the Preparation of Meat-and-bone Meal and Effect of Added Tallow in Poultry Rations" 281

Gibson, G. (with G. D. Keefer, H. T. Green and P. H. J. van Waveren)—
"Effects of Withholding Irrigation After Transplanting Tobacco" 387

Ginger—
chemical constituents 205
Fusarium rhizome rot 263

Grass—
establishment failures 17
hay 369
silage 109

Green, H. T. (with G. D. Keefer, G. Gibson and P. H. J. van Waveren)—
"Effects of Withholding Irrigation After Transplanting Tobacco" 387

Greening, H. C.—
"Scalicides for Use on Papaws in Queensland" 107

"Growth of the Pedigree Large White Pig Population in Australia" 137

Guar, bacterial leaf spot 351

H

Hendricksen, R. E.—
"Effect of Stage and Intensity of Defoliation on the Growth of Cowpea" .. 343

Herbicides—
establishment of stylo 215
eucalyptus control 423

I

"Incidence of *Byssochlamys fulva* in Queensland-grown Canned Strawberries" .. 347

"Influence of Preliminary Incubation on the Methylene Blue Results of Farm-refrigerated Milks" 95

"Insecticide Resistance in *Phthorimaea operculella* (Zell.): Comparative Responses to DDT, DDD, Endrin, Dieldrin, Isobenzan, Lindane and Azinphos-ethyl" 511

PAGE

"Insecticide Resistance in *Phthorimaea operculella* (Zell.): Larval Responses to Endrin and Azinphos-ethyl" 461

"Insecticide Resistance in *Phthorimaea operculella* (Zell.) with particular Reference to DDT" 69

Insecticides—
codling moth 59
resistance 69, 461, 511, 515
scalicides 107

"Insects and Mites Associated with Stored Products in Queensland. 1. Psocoptera" 259

K

Kangaroos 89, 301, 319

Keefer, G. D. (with G. Gibson, H. T. Green, and P. H. J. van Waveren)—
"Effects of Withholding Irrigation After Transplanting Tobacco" 387

Kirkpatrick, T. H.—
"Studies of Macropodidae in Queensland. 1. Food preferences of the Grey Kangaroo (*Macropus major* Shaw)" 89
"Studies of Macropodidae in Queensland. 2. Age Estimation in the Grey Kangaroo, the Red Kangaroo, the Eastern Wallaroo, and the Red-necked Wallaby, with Notes on Dental Abnormalities" 301
"Studies of Macropodidae in Queensland. 3. Reproduction in the Grey Kangaroo (*Macropus major*) in Southern Queensland" 319

L

Leslie, J. K.—
"Factors Responsible for Failures in the Establishment of Summer Grasses on the Black Earths of the Darling Downs, Queensland" 17

Levitt, M. S. (with M. S. O'Bryan)—
"Studies on Grass Silage from Predominantly *Paspalum dilatatum* Pastures in South-eastern Queensland. 3. Influence of Fertilization with Nitrogen and Method of Harvesting on Silages With and Without the Addition of Molasses" 109

Lightbody, Lorna G.—
"Bacteriological Quality of Some Farm Water Supplies in Queensland" .. 329

Loane, Patricia C.—
"Influence of Preliminary Incubation on the Methylene Blue Results of Farm-refrigerated Milks" 95
"Production of Bacterial Alpha-amylase in Queensland Egg Pulp" 335

Lucas, P. (with J. P. Ebersohn)—
"Trees and Soil Nutrients in South-western Queensland" 431

M

"Maize Fertilizer Investigations on the Atherton Tableland" .. 485

Maize—
fertilizers 485
plant density 497

McCulloch, Janet S. (with R. C. Colbran)—
"Nematodes Associated with Wheat in Queensland" .. 353

McNee, D. A. K. (with P. J. Skerman)—
"Distribution of Chlorides in the Waters of the Catchment of the Macintyre Brook, Southern Queensland, and their Effect on Tobacco Production" 39

PAGE

McPhee, C. P.—
"Growth of the Pedigree Large White Pig Population in Australia" 137

Meat-and-bone Meal, evaluation 1, 125, 281

Milk, incubation 95

Milking equipment sanitization 365

Mitchell, A. R. (with M. E. Nicholson)—
"Pineapple Growth and Yield as Influenced by Urea Spray Schedules and Potassium Levels at Three Plant Spacings" 409

Moffett, Melda L. (with J. L. Alcorn)—
"Bacterial Leaf Spot of Guar" 351

Morris, J. G. (with R. M. Beames)—
"Effect of Salt/Urea Blocks on Body-weight, Body Composition and Wool Production of Sheep Fed Low-protein Native Grass Hay" 369

N

Nematodes 83, 273, 277, 353, 481

"Nematodes Associated with Wheat in Queensland" 353

Nicholson, A. R. (with A. R. Mitchell)—
"Pineapple Growth and Yield as Influenced by Urea Spray Schedules and Potassium Levels at Three Plant Spacings" 409

O

O'Bryan, M. S. (with M. S. Levitt)—
"Studies on Grass Silage from Predominantly *Paspalum dilatatum* Pastures in South-eastern Queensland. 3. Influence of Fertilization with Nitrogen and Method of Harvesting on Silages With and Without the Addition of Molasses" 109

"Overwintering Behaviour of *Tetranychus telarius* (L.) in the Stanthorpe District, Queensland" 169

P

Papaw—
scalicides 107

Passlow, T.—
"Bionomics of Sorghum Midge (*Contarinia sorghicola* (Coq.)) in Queensland, with Particular Reference to Diapause" 149

Passlow, T. (with J. W. Turner)—
"Control Trials Against the Brown Wheat Mite" 103

Peanut storage pests 227, 241, 281

Pears, stock and scion 419

Pigs—
pedigree population 519

Pineapple fertilizers 409

"Pineapple Growth and Yield as Influenced by Urea Spray Schedules and Potassium Levels at Three Plant Spacings" 409

Potato storage 519

PAGE

Poultry—
meat-and-bone meal evaluation 1, 125

"Production of Bacterial Alpha-amylase in Queensland Egg Pulp" 335

"Protection of Stored Potato Tubers Against *Phthorimaea operculella* (Zell.)" .. 519

R

"Reliability of Dairy Sire Surveys in Production Recorded Herds" 381

Richardson, K. C.—
"Incidence of *Byssochlamys fulva* in Queensland-grown Canned Strawberries" 347

Richardson, K. (with D. Winterton)—
"An Investigation into the Chemical Constituents of Queensland-grown Ginger" 205

S

Salmonella in stock feeds 291

Shepherd, Rosamund C. H. (with B. R. Champ)—
"A Possible Basis of Inheritance of DDT Resistance in *Phthorimaea operculella* (Zell.)" 515
"Insecticide Resistance in *Phthorimaea operculella* (Zell.): Comparative Responses to DDT, DDD, Endrin, Dieldrin, Isobenzan, Lindane and Azinphos-ethyl" 511
"Insecticide Resistance in *Phthorimaea operculella* (Zell.): Larval Responses to Endrin and Azinphos-ethyl" 461
"Insecticide Resistance in *Phthorimaea operculella* (Zell.) with Particular Reference to DDT" 69
"Protection of Stored Potato Tubers Against *Phthorimaea operculella* (Zell.)" .. 519

Silage 109

Simmons, G. C. (with J. K. Elder)—
"Examination of Queensland Stock Feeds and Fertilizers of Animal Origin for Salmonella" 291

Simmonds, J. H.—
"A Study of the Species of *Colletotrichum* Causing Ripe Fruit Rots in Queensland" 437

Skerman, P. J. (with D. A. K. McNee)—
"Distribution of Chlorides in the Waters of the Catchment of Macintyre Brook, Southern Queensland, and their effect on Tobacco Production" 39

Smith, M. G. (with J. Armitt)—
"Effectiveness of a Quaternary Ammonium Detergent-Sanitizer for Sanitizing Milking Equipment" 365

Smithers, C. N. (with B. R. Champ)—
"Insects and Mites Associated with Stored Products in Queensland. 1. Psocoptera" 259

Sorghum midge 149

Spider mite 169

Stevenson, C. D. (with E. T. Carroll)—
"Effect of Fruit Size on the Cool Storage Behaviour of Apples" 357

"Stock and Scion Investigations. XI. A Twenty-year Pruning and Root stock Trial with Apple Trees" 187

"Stock and Scion Studies. XIII. Some New Clonal Pear Rootstocks" 419

Stored products pests 227, 241, 259

PAGE

Strawberries—
Byssochlamys .. 347
Fusarium wilt .. 475

"Studies of Macropodidae in Queensland. 1. Age estimation in the Grey Kangaroo, the Red Kangaroo, the Eastern Wallaroo and the Red-necked Wallaby, with Notes on Dental Abnormalities" .. 301

"Studies of Macropodidae in Queensland. 2. Food Preferences of the Grey Kangaroo (*Macropus major* Shaw)" .. 89

"Studies of Macropodidae in Queensland. 3. Reproduction in the Grey Kangaroo (*Macropus major*) in Southern Queensland" .. 319

"Studies of Plant and Soil Nematodes. 9. *Trichodorus lobatus* n.sp. (Nematoda: Trichodoridae), a Stubby-root Nematode Associated with Citrus and Peach Trees" .. 273

"Studies of Plant and Soil Nematodes. 10. *Paratylenchus coronatus* n.sp. (Nematoda: Criconematidae), a Pin Nematode Associated with Citrus" .. 277

"Studies of Plant and Soil Nematodes. 11. *Carphodorus bilineatus* n.g., n.sp. (Nematoda:Dolichodorinae) from Eucalypt Forest in Queensland" .. 481

"Studies on Codling Moth Control in the Stanthorpe District, Queensland" .. 59

"Studies on Grass Silage from Predominantly *Paspalum dilatatum* Pastures in South-eastern Queensland. 3. Influence of Fertilization with Nitrogen and Method of Harvesting on Silages With and Without the Addition of Molasses" .. 109

Stylo, establishment .. 215

T

Teakle, D. S.—
"Fusarium Rhizome Rot of Ginger in Queensland" .. 263

"Tests of Cotton Seed Treatments for Early Emergence" .. 503

Thomas, L. A.—
"Stock and Scion Investigations. XI. A Twenty-year Pruning and Rootstock Trial with Apple Trees" .. 187
"Stock and Scion Studies. XIII. Some New Clonal Pear Rootstocks" .. 419

"Trees and Soil Nutrients in South-western Queensland" .. 431

Trudgian, K. G.—
"Effects of Alpha Naphthalene Acetic Acid on Fruiting Patterns and Yield of Irrigated Cotton in Central Queensland" .. 49

Turner, J. W. (with T. Passlow)—
"Control Trials Against the Brown Wheat Mite" .. 103

U

Urea for sheep .. 369

V

van der List, J. (with J. van Haeringen)—
"Effects of Plant Density on Maize Yield on the Atherton Tableland, Queensland" 497

van Haeringen, J.—
"Maize Fertilizer Investigations on the Atherton Tableland, Queensland" .. 485

van Haeringen, J. (with J. van der List)—
"Effects of Plant Density on Maize Yield on the Atherton Tableland, Queensland 497

van Waveren, P. H. J. (with G. D. Keefer, G. Gibson and H. T. Green)—
"Effects of Withholding Irrigation After Transplanting Tobacco" .. 387

W

PAGE

Water—
bacteriological quality 329
chloride content 39

Williams, Yolande N. (with Barbara L. Winks)—
" A Wilt of Strawberry Caused by a New Form of *Fusarium oxysporum*" .. 475

Winks, Barbara L. (with Yolande N. Williams)—
" A Wilt of Strawberry Caused by a New Form of *Fusarium oxysporum*" .. 475

Winteron, D. (with K. Richardson)—
"An Investigation into the Chemical Constitutents of Queensland-grown Ginger" 205

Woolly aphid control 469

Y

Young, N. D.—
"A Study of Various Methods and Herbicides in Eucalyptus Regrowth Control" 423

S. G. REID, Government Printer, Brisbane

COMMONWEALTH INSTITUTE
OF ENTOMOLOGY
LIBRARY.

30 JAN 1970

SEPARATE
SERIAL Aus. 40